



CONSULTING GROUP

**A Postretirement Welfare Benefit  
GASB 45 Actuarial Valuation  
As of July 1, 2007**

For:

**Amherst-Pelham  
Regional School District**

Prepared by:  
The USI Consulting Group

October 27, 2008



CONSULTING GROUP

October 27, 2008

Town of Amherst  
4 Boltwood Ave.  
Amherst, MA 01002

**RE: July 1, 2007 Actuarial Valuation of Postretirement Welfare Benefits**

We enclose the report covering the actuarial valuation of the postretirement medical insurance plan for the employees of the Amherst-Pelham Regional School District as of July 1, 2007. The numbers presented in this report reflect the adoption, by the Amherst-Pelham Regional School District, of the Statement of Governmental Accounting Standard No. 45 (GASB 45).

The financial results of the actuarial valuation are summarized in the report. The Executive Summary highlights the results of the valuation, including the calculation of the Annual OPEB Cost (expense) for the fiscal year beginning July 1, 2007, \$3,156,545 which is based on a 30 year amortization of the UAAL as of July 1, 2007. The 30 year calculation represents the *maximum* amortization period allowed under the parameters of GASB 45 and produces the *minimum* Annual OPEB Cost under GASB 45.

Additional information summarizing census information, actuarial assumptions, and the methodology for developing them, as well as a glossary of selected terms used in this study, are also included in the report.

All calculations are made in accordance with our understanding of the provisions of the Statement of Governmental Accounting Standards Board Number 45 (GASB 45). We believe this report provides all of the information your auditor requires. We would appreciate a copy of the footnote to your financial statement related to the postretirement benefits.

Respectfully submitted,

**USI Consulting Group**

A handwritten signature in cursive script that reads "Robert W. Webb".

Robert W. Webb, FSA, EA, MAAA  
Vice President and Actuary



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## Section I

# Executive Summary

The section presents the results of the July 1, 2007 valuation. The first section provides a brief summary of the valuation results. The Executive Summary Detail provides a more detailed development of the expenses and liabilities. Items I through IV show the development of the Annual Required Contribution (ARC). Items V through VIII show the calculation of the Annual OPEB Cost. Item X provides a brief summary of the key assumptions used in developing the plan's costs and liabilities.

## EXECUTIVE SUMMARY

### Introduction

This report details the development of the Annual OPEB Cost for the Fiscal Year ending June 30, 2008. Estimated June 30, 2008 disclosures are included in Section III

The liabilities developed in this report are only valid for purposes of meeting employer accounting requirements as required by Statement of Governmental Accounting Standards Number 45 (GASB 45). Liabilities developed for other purposes could be significantly different than those shown in this report.

### Summary of Results

The Actuarial Accrued Liability and Normal Cost are calculated as of the valuation date. The Annual OPEB Cost and Expected Benefit Payments are for the year beginning on the valuation date. Additional detail is developed in the exhibits included in this actuarial valuation report.

| <u>Valuation Date</u>                                      | <u>July 1, 2007</u> |
|--|---------------------|
| <i>Present Value of Future Benefit Payments</i>            | \$53,757,700        |
| <i>Unfunded Actuarial Accrued Liability (UAAL)</i>         | \$34,800,006        |
| <i>Annual Required Contribution (30 year amortization)</i> | \$3,156,545         |
| <i>Expected Benefit Payments</i>                           | \$1,159,555         |
| <i>Net OPEB Obligation (NOO)</i>                           | \$0                 |

### Economic Assumptions

The employer, with the approval of the auditor, is responsible for selecting the economic assumptions as of the disclosure date. The following table details the selected economic assumptions for the current fiscal year:

| <u>Assumption Selection Date</u>                | <u>July 1, 2007</u> |
|---|---------------------|
| <i>Funding Interest Rate*</i>                   | 4.25%               |
| <i>2007 Trend Rates (Medical/Rx)</i>            | 10.00%/11.00%       |
| <i>Ultimate Medical Cost Trend Rate</i>         | 5.00%/6.00%         |
| <i>Year Ultimate Medical Trend Rate Reached</i> | 2012                |
| <i>Annual Salary Increases</i>                  | 4.00%               |
| <i>Projected annual increase in payroll</i>     | 2.50%               |

\* Reflects current funding policy (assumes no funding).

### Changes included in current valuation

A fresh start approach was used.

### Accounting for Postretirement Benefits

This report provides the information needed to prepare the footnote in your financial statements related to your postretirement benefit plans. The unfunded actuarial accrued liability and the ARC are developed in the Executive Summary Detail included in this section. For this Fiscal Year / Valuation Report, Section III presents the disclosure information based on estimated contributions made.

### Actuarial Certification

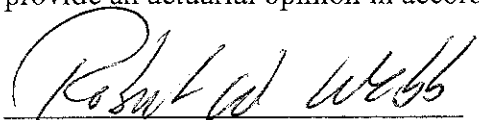
The financial results of the actuarial valuation are summarized in this report. The valuation has been prepared as of July 1, 2007. The detail charts included in this Executive Summary highlight the results of the valuation. Additional information summarizing the census, actuarial assumptions, plan provisions, and a glossary of selected terms used in this study are also included in this report.

The valuation is based on the July 1, 2007 census data and plan information as provided by the employer. We have reviewed both the census and financial data for reasonableness, but have not completed an independent audit of the information.

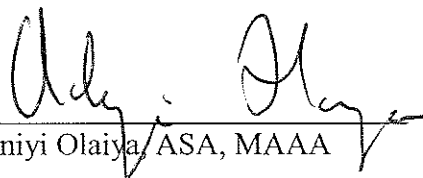
All costs, liabilities, and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. The calculations are consistent and undertaken with our understanding of Statement of Governmental Accounting Standards Number 45 (GAS 45). In our opinion, the actuarial assumptions are reasonable, taking in account the experience of the plan and reasonable expectations and, individually represent our best estimate of the anticipated experience under the plan.

I have no relationship with the employer or the plan that would objectively impair, or appear to impair, my ability to perform the work detailed in this report.

I certify that I am a member of the American Academy of Actuaries and meet its Qualification Standards to provide an actuarial opinion in accordance with GASB 45.



Robert W. Webb, FSA, EA, MAAA  
Vice President and Actuary



Adeniyi Olaiya, ASA, MAAA  
Actuary

**EXECUTIVE SUMMARY DETAIL**

**GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION AND ANNUAL OPEB COST**

**July 1, 2007 COMBINED RESULTS**

(Actuarial Cost Method - Entry Age Normal)

|   |                     |
|---|---------------------|
| <b><i>I. Present value of Future benefits</i></b>             |                     |
| A. Retirees/Disableds   | \$19,476,961        |
| B. Active Employees   | <u>\$34,280,739</u> |
| C. Total  | \$53,757,700        |
| <b><i>II. Unfunded Actuarial Accrued Liability (UAAL)</i></b> |                     |
| A. Retirees   | \$19,476,961        |
| B. Active Employees   | <u>\$15,323,045</u> |
| C. Total  | \$34,800,006        |
| <b><i>III. Annual Required Contribution (ARC)</i></b>         |                     |
| A. Normal Cost  | \$1,584,556         |
| B. Supplemental Cost  |                     |
| (i) Funding liability   | \$34,800,006        |
| (ii) Actuarial Assets   | \$0                 |
| (iii) Unfunded Actuarial Accrued Liability [ (i) - (ii) ]     | \$34,800,006        |
| (iv) Amortization Period                                      | 30.00               |
| (v) Supplemental Cost   | \$1,466,941         |
| C. Beginning Of Year Contribution                             |                     |
| [A. + B. (v)]   | \$3,051,497         |
| D. Compound Interest to Year End                              | <u>\$105,048</u>    |
| E. Preliminary ARC  | \$3,156,545         |
| [C. + D.]   |                     |
| <b><i>IV. Annual Required Contribution (ARC)</i></b>          | \$3,156,545         |
| <b><i>[III. E.]</i></b>                                       |                     |
| <b><i>V. Net OPEB Obligation</i></b>                          | \$0                 |
| <b><i>VI. Interest on net OPEB Obligation</i></b>             | \$0                 |
| <b><i>VII. Adjustment to ARC</i></b>                          | (\$0)               |
| <b><i>VIII. Annual OPEB Cost (Expense)</i></b>                | \$3,156,545         |
| <b><i>[III. + IV. - V.]</i></b>                               |                     |
| <b><i>IX. Expected Benefit Payments</i></b>                   | \$1,159,555         |
| <b><i>X. Key Actuarial Assumptions</i></b>                    |                     |
| A. Funding interest Rate                                      | 4.25%               |
| B. 2007 Medical / Drug Trend Rate                             | 10.0%/11.0%         |
| C. Ultimate Medical/DrugTrend Rate                            | 5.0%/6.0%           |
| D. Year ultimate Medical Trend rate reached                   | 2012                |
| E. Annual Payroll Increase                                    | 2.50%               |

**EXECUTIVE SUMMARY DETAIL**

**GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION AND ANNUAL OPEB COST  
PLAN RESULTS BY AGE**

(Actuarial Cost Method - Entry Age Normal)

|   | <u>Under 65</u> | <u>Over 65</u> | <u>Total</u> |
|---|-----------------|----------------|--------------|
| <b>I. Present value of Future benefits</b>                        |                 |                |              |
| A. Retirees/Disableds   | \$2,610,284     | \$16,866,677   | \$19,476,961 |
| B. Active Employees   | \$7,021,323     | \$27,259,416   | \$34,280,739 |
| C. Total  | \$9,631,607     | \$44,126,093   | \$53,757,700 |
| <b>II. Unfunded Actuarial Accrued Liability (UAAL)</b>            |                 |                |              |
| A. Retirees   | \$2,610,284     | \$16,866,677   | \$19,476,961 |
| B. Active Employees   | \$2,926,156     | \$12,396,889   | \$15,323,045 |
| C. Total  | \$5,536,440     | \$29,263,566   | \$34,800,006 |
| <b>III. Annual Required Contribution (ARC)</b>                    |                 |                |              |
| A. Normal Cost  | \$313,661       | \$1,270,895    | \$1,584,556  |
| B. Supplemental Cost  |                 |                |              |
| (i) Funding liability   | \$5,536,440     | \$29,263,566   | \$34,800,006 |
| (ii) Actuarial Assets   | \$0             | \$0            | \$0          |
| (iii) Unfunded Actuarial Accrued Liability [ (i) - (ii) ]         | \$5,536,440     | \$29,263,566   | \$34,800,006 |
| (iv) Amortization Period  | 30.00           | 30.00          | 30.00        |
| (v) Supplemental Cost   | \$233,380       | \$1,233,561    | \$1,466,941  |
| C. Beginning Of Year Contribution<br>[A. + B. (v)]                | \$547,041       | \$2,504,456    | \$3,051,497  |
| D. Compound Interest to Year End                                  | \$12,179        | \$92,869       | \$105,048    |
| E. Preliminary ARC<br>[C. + D.]                                   | \$559,220       | \$2,597,325    | \$3,156,545  |
| <b>IV. Annual Required Contribution (ARC)<br/>    [II. E.]</b>    | \$559,220       | \$2,597,325    | \$3,156,545  |
| <b>V. Net OPEB Obligation</b>                                     | \$0             | \$0            | \$0          |
| <b>VI. Interest on net OPEB Obligation</b>                        | \$0             | \$0            | \$0          |
| <b>VII. Adjustment to ARC</b>                                     | (\$0)           | (\$0)          | (\$0)        |
| <b>VIII. Annual OPEB Cost (Expense)<br/>    [III. + IV. - V.]</b> | \$559,220       | \$2,597,325    | \$3,156,545  |
| <b>IX. Expected Benefit Payments</b>                              | \$520,971       | \$638,584      | \$1,159,555  |



EXECUTIVE SUMMARY DETAIL

GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION AND ANNUAL OPEB COST

PLAN RESULTS BY BENEFIT TYPE

(Actuarial Cost Method - Entry Age Normal)

|   | <u>Medical</u> | <u>Medicare Part B</u> | <u>Life</u> | <u>Total</u> |
|---|----------------|------------------------|-------------|--------------|
| <i>I. Present value of Future benefits</i>                        |                |                        |             |              |
| A. Retirees/Disableds   | \$18,395,998   | \$928,149              | \$152,814   | \$19,476,961 |
| B. Active Employees   | \$32,436,108   | \$1,748,098            | \$96,533    | \$34,280,739 |
| C. Total  | \$50,832,106   | \$2,676,247            | \$249,347   | \$53,757,700 |
| <i>II. Unfunded Actuarial Accrued Liability (UAAL)</i>            |                |                        |             |              |
| A. Retirees   | \$18,395,998   | \$928,149              | \$152,814   | \$19,476,961 |
| B. Active Employees   | \$14,477,120   | \$794,502              | \$51,423    | \$15,323,045 |
| C. Total  | \$32,873,118   | \$1,722,651            | \$204,237   | \$34,800,006 |
| <i>III. Annual Required Contribution (ARC)</i>                    |                |                        |             |              |
| A. Normal Cost  | \$1,498,533    | \$81,482               | \$4,541     | \$1,584,556  |
| B. Supplemental Cost  |                |                        |             |              |
| (i) Funding liability   | \$32,873,118   | \$1,722,651            | \$204,237   | \$34,800,006 |
| (ii) Actuarial Assets   | \$0            | \$0                    | \$0         | \$0          |
| (iii) Unfunded Actuarial Accrued Liability [ (i) - (ii) ]         | \$32,873,118   | \$1,722,651            | \$204,237   | \$34,800,006 |
| (iv) Amortization Period  | 30.00          | 30.00                  | 30.00       | 30.00        |
| (v) Supplemental Cost   | \$1,385,716    | \$72,616               | \$8,609     | \$1,466,941  |
| C. Beginning Of Year Contribution<br>[A. + B. (v)]                | \$2,884,249    | \$154,098              | \$13,150    | \$3,051,497  |
| D. Compound Interest to Year End                                  | \$98,643       | \$6,000                | \$405       | \$105,048    |
| E. Preliminary ARC<br>[C. + D.]                                   | \$2,982,892    | \$160,098              | \$13,555    | \$3,156,545  |
| <i>IV. Annual Required Contribution (ARC)<br/>    [II. E.]</i>    | \$2,982,892    | \$160,098              | \$13,555    | \$3,156,545  |
| <i>V. Net OPEB Obligation</i>                                     | \$0            | \$0                    | \$0         | \$0          |
| <i>VI. Interest on net OPEB Obligation</i>                        | \$0            | \$0                    | \$0         | \$0          |
| <i>VII. Adjustment to ARC</i>                                     | (\$0)          | (\$0)                  | (\$0)       | (\$0)        |
| <i>VIII. Annual OPEB Cost (Expense)<br/>    [III. + IV. - V.]</i> | \$2,982,892    | \$160,098              | \$13,555    | \$3,156,545  |
| <i>IX. Expected Benefit Payments</i>                              | \$1,126,448    | \$25,852               | \$7,255     | \$1,159,555  |

## Section II Census Information

This section details statistics related to the participants in the postretirement benefit plan.

**CENSUS INFORMATION – A.**  
**EMPLOYEE COUNTS**

|                  |        | <u>Actives</u> | <u>Retirees</u> | <u>Total</u> |
|------------------|--------|----------------|-----------------|--------------|
| Amherst-Pelham   | Male   | 106            | 60              | 166          |
| Regional Schools | Female | 179            | 97              | 276          |
|                  | Total  | 285            | 157             | 442          |

**COUNTS BY AGE AND ELIGIBILITY STATUS**

**ACTIVE EMPLOYEES :**

| <u>Age</u>   | <u>Currently<br/>Eligible<br/>to Retire</u> | <u>Not Currently<br/>Eligible<br/>to Retire</u> | <u>Total</u> |
|--------------|---|---|--------------|
| 29 and under | N/A   | 32  | 32           |
| 30 - 34      | N/A   | 27  | 27           |
| 35 - 39      | N/A   | 37  | 37           |
| 40 - 44      | 0   | 37  | 37           |
| 45 - 49      | 7   | 35  | 42           |
| 50 - 54      | 9   | 37  | 46           |
| 55 - 59      | 25  | 20  | 45           |
| 60 - 64      | 11  | 5   | 16           |
| 65 and over  | 3   | 0   | 3            |
| Total        | 55  | 230   | 285          |

**CURRENT RETIREES:**

| <u>Age</u>   | <u>Retirees*</u> | <u>Spouses</u> | <u>Total</u> |
|--------------|------------------|----------------|--------------|
| 54 and under | 1                | 3              | 4            |
| 55 - 59      | 16               | 7              | 23           |
| 60 - 64      | 43               | 11             | 54           |
| 65 - 69      | 35               | 12             | 47           |
| 70 - 74      | 12               | 6              | 18           |
| 75 - 79      | 17               | 6              | 23           |
| 80 and over  | 33               | 8              | 41           |
| Total        | 157              | 53             | 210          |

\* Retirees includes surviving spouses

CENSUS INFORMATION – B.

AVERAGE AGE AND SERVICE

As of July 1, 2007

ACTIVE EMPLOYEES:

A. Average Age at Hire

|         |      |
|---------|------|
| Males   | 34.7 |
| Females | 36.6 |
| Total   | 35.9 |

B. Average Service

|         |     |
|---------|-----|
| Males   | 9.4 |
| Females | 9.4 |
| Total   | 9.4 |

C. Average Current Age

|         |      |
|---------|------|
| Males   | 44.1 |
| Females | 46.0 |
| Total   | 45.3 |

CURRENT RETIREES

D. Average Current Age

|         |      |
|---------|------|
| Males   | 68.7 |
| Females | 70.4 |
| Total   | 69.7 |

**Section III**

**Financial Statement Disclosure**

This section provides the required information and notes to the Financial Statements for the fiscal year ending June 30, 2008.

**FINANCIAL STATEMENT DISCLOSURE**

The GASB standard on accounting for postretirement benefits other than pensions requires the following disclosures in the financial statements with regard to the retiree benefit liability:

**1.) A BRIEF DESCRIPTION OF THE RETIREE MEDICAL AND LIFE INSURANCE PLAN:**

**Type of Coverage:**

**Medical Insurance:**

**Town:** Self insured HMO and PPO through BlueCross/BlueShield and Harvard Pilgrim.

**GIC:** Fully insured Fallon HMO, Health New England HMO and Commonwealth Indemnity Plan, through the Commonwealth of Massachusetts Group Insurance Commission

**Life Insurance:**

**Town:** \$2,000

**GIC:** \$2,000

**Medicare Reimbursement:**

**Town:** Yes

**GIC:** No

**Eligibility:**

**Town:** Age 55 with at least 10 years of service or 20 years of service.

**GIC:** Age 55 with at least 10 years of service or 20 years of service.

**Cost Sharing:**

**Medical:**

**Town:** The retiree contributes 25% to the PPO and Medicare plans. The retiree pays approximately 18% to the Network Blue New England HMO and approximately 19% to the Harvard Pilgrim HMO 90.

For further breakdown of the Town's cost sharing refer to Section VI, Plan Provisions.

**GIC:** The retiree pays 10% of the medical insurance premium.

**Life Insurance:**

**Town:** The retiree pays \$2.16 annually

**GIC:** The retiree pays \$10.80 annually

**Medicare Part B:**

**Town:** The town pays 75% of the premium for the retiree and 50% for the surviving spouse.

**GIC:** The retiree pays the full premium of the Medicare Part B premium

**Spouse Coverage:**

**Town:** Yes

**GIC:** Yes

**Surviving Spouse Coverage:**

**Town:** Yes

**GIC:** No

**FINANCIAL STATEMENT DISCLOSURE (cont.)**

**2.) GASB 45 DISCLOSURE REQUIREMENTS – ESTIMATED**

|  | 07/01/07 -<br>06/30/08 | 07/01/08 -<br>06/30/09 |
|--|------------------------|------------------------|
| <b>A. Annual OPEB Cost and Net OPEB Obligation</b> |                        |                        |
| 1. Annual Required Contribution (ARC)              | \$3,156,546            | \$3,321,801            |
| 2. Interest on net OPEB Obligation                 | \$0                    | \$84,872               |
| 3. Adjustment to ARC                               | \$0                    | (\$86,409)             |
| 4. Annual OPEB Cost (Expense)                      | \$3,156,546            | \$3,320,263            |
| 5. Contribution made (assumed end of year) *       | \$1,159,555            | \$1,255,180            |
| 6. Increase in net OPEB Obligation                 | \$1,996,991            | \$2,065,083            |
| 7. Net OPEB Obligation - beginning of year         | \$0                    | \$1,996,991            |
| 8. Net OPEB Obligation - end of year               | \$1,996,991            | \$4,062,074            |

\* Contribution made was assumed to equal Expected Benefit Payments

Pelham Regional School District's annual OPEB Cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal year 2007/08 are as follows:

| Fiscal<br>Year<br>Ending | Annual<br>OPEB Cost | Percentage of<br>Annual OPEB<br>Cost Contributed | Net<br>OPEB<br>Obligation |
|--------------------------|---------------------|--|---------------------------|
| 06/30/2008               | \$3,156,546         | 36.7%  | \$1,996,991               |
| 06/30/2009               | \$3,320,263         | 37.8%  | \$4,062,074               |

**B. Funded Status and Funding Progress**

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability<br>(AAL)<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b - a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a<br>Percentage of<br>Covered<br>Payroll<br>(AAL)<br>((b - a) / c) |
|--------------------------------|--|---|--------------------------------------|--------------------------|---------------------------|--|
| 07/01/2007                     | \$0                                    | \$34,800,006                                      | \$34,800,006                         | 0.0%                     | N/A                       | N/A  |

**C. Methods and Assumptions**

|  |                  |
|--|------------------|
| - Funding Interest Rate                              | 4.25%            |
| - 2007 Medical Trend Rate                            | 10.00%           |
| - Ultimate Medical Trend Rate                        | 5.00%            |
| - Year Ultimate Medical Trend Rate Reached           | 2012             |
| - Actuarial Cost Method                              | Entry Age Normal |
| - The remaining amortization period at June 30, 2008 | 29 years         |

## Section IV

# Actuarial Assumptions And Methodology

The following pages detail the assumptions used in the calculations.



**ACTUARIAL ASSUMPTIONS AND METHODOLOGY**

1. **Funding Interest Rate:** An interest rate of 4.25% was used. A 7.00% interest rate was used in Appendix-III to show the potential impact of advance funding the plan in accordance with GASB 45.
2. **Mortality:** The mortality rates are from the RP-2000 Combined Mortality Table projected to 2007 with projection scale AA.

3. **Disability Rates:** None assumed

4. **Termination Rates:**

| <u>Age</u> | <u>Years of Service</u> |       |       |
|------------|-------------------------|-------|-------|
|            | 0                       | 5     | 10+   |
| 20         | .180%                   | .000% | .000% |
| 30         | .150%                   | .090% | .041% |
| 40         | .125%                   | .070% | .031% |
| 50         | .100%                   | .048% | .021% |

5. **Health Care Trend Rates:** It was assumed that health care costs would increase in accordance with the trend rates in the following table:

| <u>Year</u> | <u>Medical Rates</u> | <u>Drug Rates</u> |
|-------------|----------------------|-------------------|
| 2007        | 10.0%                | 11.0%             |
| 2008        | 9.0%                 | 10.0%             |
| 2009        | 8.0%                 | 9.0%              |
| 2010        | 7.0%                 | 8.0%              |
| 2011        | 6.0%                 | 7.0%              |
| 2012+       | 5.0%                 | 6.0%              |

6. **Retirement Rates:**

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 45         | 0.0%        | 0.0%          |
| 50         | 1.5%        | 3.0%          |
| 55         | 4.0%        | 5.0%          |
| 60         | 8.0%        | 8.0%          |
| 65         | 25.0%       | 25.0%         |
| 70         | 100%        | 100%          |

**ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)**

7. **Participation Rate:** It was assumed that 100% of the current active town employees and 90% of the current active school employees covered under the town plan on the day before retirement would enroll in the retiree medical plan upon retirement.
- It was assumed that 65% of the current active school employees covered under the town plan on the day before retirement would enroll in a GIC plan upon retirement.
8. **Percent Married:** It was assumed that 55% of the male and 30% of the female employees who elect retiree health care coverage for themselves would also elect coverage for their spouse upon retirement. It was assumed that spouses would be the same age as the retiree. For current retirees, actual census information was used.
9. **Actuarial Value of Assets:** N/A
10. **Per Capita Claims Cost:** Conventional insured equivalent premiums were age-graded on the current participants in the Town's Medical plan. Further details of the annual per capita claims cost is featured in Section V of the report.
- The premiums paid to the GIC plans are independent of the Town's experience and demographic profile, and are expected to change consistent with a community rated plan. Thus we have applied the premiums with no additional adjustments other than future trend increases.
11. **Participant Salary Increases:** 4.00% annually
12. **Payroll Growth Rate:** 2.50% annually

## ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

### ACTUARIAL COST METHOD

An Actuarial Cost Method develops an orderly allocation of the actuarial present value of benefits payments over the working lifetime of the participants in the plan. The actuarial present value of benefits allocated to a particular fiscal year is called the Normal Cost. The actuarial present value of benefits allocated to all periods prior to a valuation date is called the Actuarial Accrued Liability. The Unfunded Actuarial Accrued Liability is amortized over future years in accordance with the employer's established accounting policy.

Six Actuarial Cost Methods are acceptable for use under GASB 45: entry age, frozen entry age, attained age, frozen attained age, projected unit credit, and aggregate.

The amortization of the unfunded actuarial accrued liability may be determined in level dollar amounts or as a level percentage of projected payroll of active plan members. The total unfunded actuarial accrued liability may be amortized as one amount, or components of the total may be separately amortized. The equivalent single amortization period for all components combined may not exceed the maximum acceptable period of 30 years.

### ADDITIONAL COMMENTS

The values in this GASB 45 valuation represent a closed group and do not reflect new entrants after the census collection date.

## Section V

# Representative Claim Costs

Based on combined actual claims and premium experience, age-related representative per capita claims cost were developed. This section shows the development of these costs.

**REPRESENTATIVE 2007 PER CAPITA MEDICAL CLAIM COSTS FOR TOWN PLAN**

**I. DEVELOPMENT OF PER CAPITA RETIREE CLAIM COSTS**

|              |  |
|--------------|--|
| \$11,016,002 | Total Estimated Premium                    |
| \$1,377,431  | Estimated Children's Premium               |
| \$9,638,571  | Employer Primary Premium Based Claims      |
| \$693,508    | Medicare Primary Premium Based Claims      |
| \$10,332,079 | Total Premium Based Claims                 |
| \$9,836      | Retiree (Pre-65) Average Per Capita Claim  |
| \$5,175      | Retiree (Post-65) Average Per Capita Claim |

**ALL ACTIVE PARTICIPANTS EMPLOYER PRIMARY**

| Age<br>Bracket        | Number<br>of Males | Number<br>of Females | Male<br>Aging<br>Factor | Female<br>Aging<br>Factor | Aged (M)<br>Average<br>Claims | Aged (F)<br>Average<br>Claims | Age<br>Related<br>Claims |
|-----------------------|--------------------|----------------------|-------------------------|---------------------------|-------------------------------|-------------------------------|--------------------------|
| 24 & under            | 9                  | 6                    | 0.549                   | 1.312                     | \$2,601                       | \$6,215                       | \$60,694                 |
| 25 - 29               | 33                 | 59                   | 0.591                   | 1.312                     | \$2,800                       | \$6,215                       | \$459,061                |
| 30 - 34               | 49                 | 69                   | 0.712                   | 1.312                     | \$3,373                       | \$6,215                       | \$594,087                |
| 35 - 39               | 71                 | 75                   | 0.850                   | 1.312                     | \$4,026                       | \$6,215                       | \$751,988                |
| 40 - 44               | 67                 | 79                   | 1.000                   | 1.312                     | \$4,737                       | \$6,215                       | \$808,348                |
| 45 - 49               | 74                 | 115                  | 1.193                   | 1.456                     | \$5,651                       | \$6,897                       | \$1,211,338              |
| 50 - 54               | 106                | 113                  | 1.441                   | 1.599                     | \$6,826                       | \$7,574                       | \$1,579,450              |
| 55 - 59               | 102                | 104                  | 1.753                   | 1.740                     | \$8,304                       | \$8,242                       | \$1,704,188              |
| 60 - 64               | 46                 | 30                   | 2.102                   | 1.968                     | \$9,957                       | \$9,322                       | \$737,692                |
| 65 - 69               | 8                  | 3                    | 2.316                   | 2.168                     | \$10,971                      | \$10,270                      | \$118,575                |
| Employer Primary Sub. | 565                | 653                  |                         |                           |                               |                               | \$8,025,422              |

**ALL RETIREE PARTICIPANTS EMPLOYER PRIMARY**

| Age<br>Bracket        | Number<br>of Males | Number<br>of Females | Male<br>Aging<br>Factor | Female<br>Aging<br>Factor | Aged (M)<br>Average<br>Claims | Aged (F)<br>Average<br>Claims | Age<br>Related<br>Claims |
|-----------------------|--------------------|----------------------|-------------------------|---------------------------|-------------------------------|-------------------------------|--------------------------|
| 44 & under            | 1                  | 1                    | 1.000                   | 1.312                     | \$4,737                       | \$6,215                       | \$10,952                 |
| 45 - 49               | 0                  | 3                    | 1.193                   | 1.456                     | \$5,651                       | \$6,897                       | \$20,691                 |
| 50 - 54               | 3                  | 11                   | 1.441                   | 1.599                     | \$6,826                       | \$7,574                       | \$103,796                |
| 55 - 59               | 24                 | 23                   | 1.753                   | 1.740                     | \$8,304                       | \$8,242                       | \$388,864                |
| 60 - 64               | 23                 | 23                   | 2.102                   | 1.968                     | \$9,957                       | \$9,322                       | \$443,424                |
| 65 - 69               | 5                  | 9                    | 2.316                   | 2.168                     | \$10,971                      | \$10,270                      | \$147,281                |
| 70 - 74               | 3                  | 1                    | 2.557                   | 2.396                     | \$12,112                      | \$11,350                      | \$47,687                 |
| 75 - 79               | 1                  | 10                   | 2.769                   | 2.593                     | \$13,117                      | \$12,283                      | \$135,945                |
| 80 - 84               | 4                  | 6                    | 2.910                   | 2.724                     | \$13,784                      | \$12,903                      | \$132,558                |
| 85 - 89               | 2                  | 7                    | 3.059                   | 2.864                     | \$14,490                      | \$13,567                      | \$123,947                |
| 90 & Over             | 1                  | 3                    | 3.215                   | 3.010                     | \$15,229                      | \$14,258                      | \$58,004                 |
| Employer Primary Sub. | 67                 | 97                   |                         |                           |                               |                               | \$1,613,149              |

**ALL RETIREE PARTICIPANTS MEDICARE PRIMARY**

| Age<br>Bracket        | Number<br>of Males | Number<br>of Females | Male<br>Aging<br>Factor | Female<br>Aging<br>Factor | Aged (M)<br>Average<br>Claims | Aged (F)<br>Average<br>Claims | Age<br>Related<br>Claims |
|-----------------------|--------------------|----------------------|-------------------------|---------------------------|-------------------------------|-------------------------------|--------------------------|
| 65 - 69               | 25                 | 19                   | 2.316                   | 2.168                     | \$4,759                       | \$4,454                       | \$203,598                |
| 70 - 74               | 12                 | 17                   | 2.557                   | 2.396                     | \$5,254                       | \$4,923                       | \$146,734                |
| 75 - 79               | 15                 | 23                   | 2.769                   | 2.593                     | \$5,689                       | \$5,328                       | \$207,876                |
| 80 - 84               | 8                  | 8                    | 2.910                   | 2.724                     | \$5,979                       | \$5,597                       | \$92,607                 |
| 85 - 89               | 3                  | 3                    | 3.059                   | 2.864                     | \$6,285                       | \$5,884                       | \$36,509                 |
| 90 & Over             | 0                  | 1                    | 3.215                   | 3.010                     | \$6,606                       | \$6,184                       | \$6,184                  |
| Medicare Primary Sub. | 63                 | 71                   |                         |                           |                               |                               | \$693,508                |
| Retiree Subtotal      | 130                | 168                  |                         |                           |                               |                               | \$2,306,657              |
| Grand Total           | 695                | 821                  |                         |                           |                               |                               | \$10,332,079             |

REPRESENTATIVE 2007 PER CAPITA MEDICAL CLAIM COSTS FOR TOWN PLAN

II. PREMIUM BASED CLAIM BUCKETS:

| <u>SINGLE COVERAGE</u>     | <u>People</u> | <u>Premium</u>  | <u>Annualized</u> |
|----------------------------|---------------|-----------------|-------------------|
| BHMO                       | 31            | \$543.81        | \$202,297         |
| BPPO                       | 70            | \$583.09        | \$489,796         |
| HHMO                       | 46            | \$509.54        | \$281,266         |
| HPPO                       | 225           | \$604.23        | \$1,631,421       |
| BPPOMed                    | 38            | \$413.43        | \$188,524         |
| HHMOMed                    | <u>18</u>     | <u>\$411.52</u> | <u>\$88,888</u>   |
|                            | 428           |                 | \$2,882,192       |
| <br><u>FAMILY COVERAGE</u> |               |                 |                   |
| BHMO                       | 41            | \$1,300.61      | \$639,900         |
| BPPO                       | 72            | \$1,394.53      | \$1,204,874       |
| HHMO                       | 66            | \$1,218.64      | \$965,163         |
| HPPO                       | 323           | \$1,445.12      | \$5,601,285       |
| BPPOMed                    | 28            | \$826.86        | \$277,825         |
| HHMOMed                    | <u>14</u>     | <u>\$823.04</u> | <u>\$138,271</u>  |
|                            | 544           |                 | \$8,827,318       |
| <br>TOTAL                  | 972           |                 | \$11,709,510      |

## Section VI

# Plan Provisions

This section details the plan provisions for the postretirement medical insurance benefit plan.

**PLAN PROVISIONS**  
**RETIREE MEDICAL AND LIFE INSURANCE PLANS**

*a. Plan Types:*

**Medical:**

Town: Self Insured HMO and PPO through BlueCross/BlueShield and Harvard Pilgrim.

GIC: Fully insured Fallon HMO, Health New England HMO and Commonwealth Indemnity Plan, through the Commonwealth of Massachusetts Group Insurance Commission

**Life Insurance:**

Town: \$2,000

GIC: \$2,000

**Medicare Reimbursement:**

Town: Yes

GIC: No

*b. Eligibility:*

Town: Age 55 with at least 10 years of service or 20 years of service.

GIC: Age 55 with at least 10 years of service or 20 years of service.

*c. Benefit/Cost Sharing:*

**Medical**

**Town:**

Retirees annual contribution:

|                      |            | <u>Total<br/>Premium</u> | <u>Employee<br/>Contribution</u> | <u>Percent<br/>Employee<br/>Contributes</u> |
|----------------------|------------|--------------------------|----------------------------------|---|
| Network Blue         |            |                          |                                  |   |
| New England          | Individual | \$6,525.72               | \$1,186.32                       | 18%   |
| HMO                  | Family     | \$15,607.32              | \$2,837.28                       | 18%   |
| Network Blue         | Individual | \$6,997.08               | \$1,749.36                       | 25%   |
| New England          | Family     | \$16,734.36              | \$4,183.68                       | 25%   |
| PPO                  |            |                          |                                  |   |
| Harvard Pilgrim      | Individual | \$6,114.48               | \$1,186.32                       | 19%   |
| HMO 90               | Family     | \$14,623.68              | \$2,837.28                       | 19%   |
| Harvard Pilgrim      | Individual | \$7,250.76               | \$1,799.52                       | 25%   |
| PPO                  | Family     | \$17,341.44              | \$4,303.68                       | 25%   |
| Medicare Plans       | Individual | \$4,961.16               | \$1,240.44                       | 25%   |
| BlueCross/BlueShield | Family     | \$9,922.32               | \$2,480.40                       | 25%   |
| MEDEX                |            |                          |                                  |   |
| Harvard Pilgrim      | Individual | \$4,938.24               | \$1,217.40                       | 25%   |
| Enhanced 65          | Family     | \$9,876.48               | \$2,469.36                       | 25%   |



**PLAN PROVISIONS (cont.)**

***c. Benefit/Cost Sharing  
(continued:)***

**Medical**

**GIC:**

The retiree pays 10% of the medical insurance premium shown below.

**Non-Medicare Plans**

Commonwealth Indemnity Plan without CIC

Individual \$8,955.60

Family \$21,523.20

Fallon Community Health Select Care HMO

Individual \$5,191.20

Family \$12,315.60

Health New England HMO

Individual \$4,737.60

Family \$11,736.00

**Medicare Plans**

Commonwealth Indemnity Plan

Individual \$4,046.40

Dependent \$4,046.40

Health New England MedRate

Individual \$4,756.80

Dependent \$4,756.80

**Life Insurance:**

**Town:** The retiree pays \$2.16 annually

**GIC:** The retiree pays \$10.80 annually

**Medicare Part B:**

**Town:** The town pays 75% of the premium for the retiree and 50% for the surviving spouse.

**GIC:** The retiree pays the full premium of the Medicare Part B premium

***d. Spouse Benefit:***

**Town:** Yes

**GIC:** Yes

***e. Surviving Spouse Benefit:***

**Town:** Yes

**GIC:** No

***f. Drug Plan:***

**Town:** CanaRX mail order program where the town pays the entire expense of the drugs. Used \$425.88 as an estimated annual cost per person.

**GIC:** None

***g. Annual Life  
Premium:***

**Town:** \$8.64

**GIC:** \$64.08

Section VII  
Appendices

APPENDIX - I.

ACTIVE EMPLOYEE BY AGE AND SERVICE

AS OF JULY 1, 2007

| Age         | Service |       |         |         |         |         |         |         |     | Total |
|-------------|---------|-------|---------|---------|---------|---------|---------|---------|-----|-------|
|             | 0 - 4   | 5 - 9 | 10 - 14 | 15 - 19 | 20 - 24 | 25 - 29 | 30 - 34 | 35 - 39 | 40+ |       |
| 0 - 19      | 0       | 0     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 0     |
| 20 - 24     | 5       | 0     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 5     |
| 25 - 29     | 21      | 6     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 27    |
| 30 - 34     | 19      | 8     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 27    |
| 35 - 39     | 20      | 15    | 2       | 0       | 0       | 0       | 0       | 0       | 0   | 37    |
| 40 - 44     | 16      | 12    | 7       | 2       | 0       | 0       | 0       | 0       | 0   | 37    |
| 45 - 49     | 10      | 14    | 4       | 7       | 4       | 3       | 0       | 0       | 0   | 42    |
| 50 - 54     | 12      | 12    | 8       | 5       | 3       | 4       | 2       | 0       | 0   | 46    |
| 55 - 59     | 13      | 7     | 5       | 5       | 2       | 6       | 6       | 1       | 0   | 45    |
| 60 - 64     | 2       | 3     | 3       | 1       | 2       | 4       | 0       | 0       | 1   | 16    |
| 65 - 69     | 0       | 0     | 2       | 0       | 0       | 0       | 1       | 0       | 0   | 3     |
| 70 - 74     | 0       | 0     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 0     |
| 75 - 79     | 0       | 0     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 0     |
| 80 - 84     | 0       | 0     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 0     |
| 85 and Over | 0       | 0     | 0       | 0       | 0       | 0       | 0       | 0       | 0   | 0     |
| Total       | 118     | 77    | 31      | 20      | 11      | 17      | 9       | 1       | 1   | 285   |

**APPENDIX - II**

**ALTERNATIVE ACTUARIAL COST AND AMORTIZATION METHODS**

(Assumes a 4.25% Return on Supporting Assets)

|   | Entry Age      | Frozen<br>Entry Age | Attained Age   | Frozen<br>Attained Age | Projected<br>Unit Credit | Aggregate      |
|---|----------------|---------------------|----------------|------------------------|--------------------------|----------------|
| 1. Projected Benefit Payments                   | \$ 163,995,237 | \$ 163,995,237      | \$ 163,995,237 | \$ 163,995,237         | \$ 163,995,237           | \$ 163,995,237 |
| 2. Present Value of Projected Benefit Payments  | \$ 53,757,700  | \$ 53,757,700       | \$ 53,757,700  | \$ 53,757,700          | \$ 53,757,700            | \$ 53,757,701  |
| 3. Actuarial Accrued Liability (AAL)            | \$ 34,800,006  | \$ 34,800,006       | \$ 39,072,211  | \$ 39,072,211          | \$ 39,072,211            | \$ -           |
| 4. Present Value of Future Normal Costs (2.-3.) | \$ 18,957,694  | \$ 18,957,694       | \$ 14,685,489  | \$ 14,685,489          | \$ 14,685,489            | \$ 53,757,701  |
| 5. Assets                                       | \$ -           | \$ -                | \$ -           | \$ -                   | \$ -                     | \$ -           |
| 6. Unfunded UAAL                                | \$ 34,800,006  | \$ 34,800,006       | \$ 39,072,211  | \$ 39,072,211          | \$ 39,072,211            | \$ -           |
| 7. Annual Required Contribution                 |                |                     |                |                        |                          |                |
| a. Normal Cost                                  | \$ 1,584,556   | \$ 1,537,479        | \$ 1,190,068   | \$ 1,190,068           | \$ 1,671,726             | \$ 4,353,727   |
| b. Amortization of UAAL (30 yrs Level % of pay) | \$ 1,466,941   | \$ 1,466,941        | \$ 1,647,029   | \$ 1,647,029           | \$ 1,647,030             | \$ -           |
| c. Interest                                     | \$ 105,048     | \$ 103,047          | \$ 95,936      | \$ 95,936              | \$ 116,408               | \$ 160,393     |
| d. Total  | \$ 3,156,545   | \$ 3,107,467        | \$ 2,933,033   | \$ 2,933,033           | \$ 3,435,164             | \$ 4,514,120   |
| 8. Current Year Benefit Payment                 | \$ 1,159,555   | \$ 1,159,555        | \$ 1,159,555   | \$ 1,159,555           | \$ 1,159,555             | \$ 1,159,555   |
| 9. Alternate Amortization of UAAL:              |                |                     |                |                        |                          |                |
| a. 30 Yrs Level Dollar                          | \$ 1,989,467   | \$ 1,989,467        | \$ 2,233,703   | \$ 2,233,703           | \$ 2,233,703             | \$ -           |
| b. 30 Yrs Level % of Pay                        | \$ 1,466,941   | \$ 1,466,941        | \$ 1,647,029   | \$ 1,647,029           | \$ 1,647,029             | \$ -           |
| c. 25 Yrs Level Dollar                          | \$ 2,193,636   | \$ 2,193,636        | \$ 2,462,937   | \$ 2,462,937           | \$ 2,462,937             | \$ -           |
| d. 25 Yrs Level % of Pay                        | \$ 1,692,912   | \$ 1,692,912        | \$ 1,900,742   | \$ 1,900,742           | \$ 1,900,742             | \$ -           |
| e. 20 Yrs Level Dollar                          | \$ 2,510,936   | \$ 2,510,936        | \$ 2,819,190   | \$ 2,819,190           | \$ 2,819,190             | \$ -           |
| f. 20 Yrs Level % of Pay                        | \$ 2,033,892   | \$ 2,033,892        | \$ 2,283,582   | \$ 2,283,582           | \$ 2,283,582             | \$ -           |
| g. 15 Yrs Level Dollar                          | \$ 3,055,071   | \$ 3,055,071        | \$ 3,430,125   | \$ 3,430,125           | \$ 3,430,125             | \$ -           |
| h. 15 Yrs Level % of Pay                        | \$ 2,604,908   | \$ 2,604,908        | \$ 2,924,698   | \$ 2,924,698           | \$ 2,924,698             | \$ -           |
| 10. Alternate Annual Required Contribution      |                |                     |                |                        |                          |                |
| a. 30 Yrs Level Dollar                          | \$ 3,701,278   | \$ 3,652,201        | \$ 3,544,641   | \$ 3,544,641           | \$ 4,046,769             | \$ 4,514,120   |
| b. 30 Yrs Level % of Pay                        | \$ 3,156,545   | \$ 3,107,467        | \$ 2,933,033   | \$ 2,933,033           | \$ 3,435,164             | \$ 4,514,120   |
| c. 25 Yrs Level Dollar                          | \$ 3,914,125   | \$ 3,865,047        | \$ 3,783,617   | \$ 3,783,617           | \$ 4,285,746             | \$ 4,514,120   |
| d. 25 Yrs Level % of Pay                        | \$ 3,392,120   | \$ 3,343,042        | \$ 3,197,529   | \$ 3,197,529           | \$ 3,699,657             | \$ 4,514,120   |
| e. 20 Yrs Level Dollar                          | \$ 4,244,910   | \$ 4,195,832        | \$ 4,155,011   | \$ 4,155,011           | \$ 4,657,139             | \$ 4,514,120   |
| f. 20 Yrs Level % of Pay                        | \$ 3,747,592   | \$ 3,698,514        | \$ 3,596,640   | \$ 3,596,640           | \$ 4,098,770             | \$ 4,514,120   |
| g. 15 Yrs Level Dollar                          | \$ 4,812,171   | \$ 4,763,093        | \$ 4,791,911   | \$ 4,791,911           | \$ 5,294,039             | \$ 4,514,120   |
| h. 15 Yrs Level % of Pay                        | \$ 4,342,876   | \$ 4,293,798        | \$ 4,265,003   | \$ 4,265,003           | \$ 4,767,131             | \$ 4,514,120   |

**APPENDIX - III**

**ALTERNATIVE ACTUARIAL COST AND AMORTIZATION METHODS**

(Assumes a 7.00% Return on Supporting Assets)

|   | Entry Age      | Frozen<br>Entry Age | Attained Age   | Frozen<br>Attained Age | Projected<br>Unit Credit | Aggregate      |
|---|----------------|---------------------|----------------|------------------------|--------------------------|----------------|
| 1. Projected Benefit Payments                   | \$ 163,995,237 | \$ 163,995,237      | \$ 163,995,237 | \$ 163,995,237         | \$ 163,995,237           | \$ 163,995,237 |
| 2. Present Value of Projected Benefit Payments  | \$ 32,234,113  | \$ 32,234,113       | \$ 32,234,113  | \$ 32,234,113          | \$ 32,234,113            | \$ 32,234,113  |
| 3. Actuarial Accrued Liability (AAL)            | \$ 24,424,021  | \$ 24,424,021       | \$ 25,772,083  | \$ 25,772,083          | \$ 25,772,083            | \$ -           |
| 4. Present Value of Future Normal Costs (2-3)   | \$ 7,810,092   | \$ 7,810,092        | \$ 6,462,030   | \$ 6,462,030           | \$ 6,462,030             | \$ 32,234,113  |
| 5. Assets                                       | \$ -           | \$ -                | \$ -           | \$ -                   | \$ -                     | \$ -           |
| 6. Unfunded UAAL                                | \$ 24,424,021  | \$ 24,424,021       | \$ 25,772,083  | \$ 25,772,083          | \$ 25,772,083            | \$ -           |
| 7. Annual Required Contribution                 |                |                     |                |                        |                          |                |
| a. Normal Cost                                  | \$ 829,583     | \$ 787,219          | \$ 650,472     | \$ 650,472             | \$ 821,822               | \$ 3,252,360   |
| b. Amortization of UAAL (30 yrs Level % of pay) | \$ 1,417,876   | \$ 1,417,876        | \$ 1,496,135   | \$ 1,496,135           | \$ 1,496,135             | \$ -           |
| c. Interest                                     | \$ 116,738     | \$ 113,772          | \$ 109,678     | \$ 109,678             | \$ 121,674               | \$ 187,081     |
| d. Total  | \$ 2,364,197   | \$ 2,318,867        | \$ 2,256,285   | \$ 2,256,285           | \$ 2,439,632             | \$ 3,439,441   |
| 8. Current Year Benefit Payment                 | \$ 1,159,555   | \$ 1,159,555        | \$ 1,159,555   | \$ 1,159,555           | \$ 1,159,555             | \$ 1,159,555   |
| 9. Alternate Amortization of UAAL:              |                |                     |                |                        |                          |                |
| a. 30 Yrs Level Dollar                          | \$ 1,839,480   | \$ 1,839,480        | \$ 1,941,009   | \$ 1,941,009           | \$ 1,941,009             | \$ -           |
| b. 30 Yrs Level % of Pay                        | \$ 1,417,876   | \$ 1,417,876        | \$ 1,496,135   | \$ 1,496,135           | \$ 1,496,135             | \$ -           |
| c. 25 Yrs Level Dollar                          | \$ 1,958,727   | \$ 1,958,727        | \$ 2,066,837   | \$ 2,066,837           | \$ 2,066,837             | \$ -           |
| d. 25 Yrs Level % of Pay                        | \$ 1,560,084   | \$ 1,560,084        | \$ 1,646,191   | \$ 1,646,191           | \$ 1,646,191             | \$ -           |
| e. 20 Yrs Level Dollar                          | \$ 2,154,631   | \$ 2,154,631        | \$ 2,273,554   | \$ 2,273,554           | \$ 2,273,554             | \$ -           |
| f. 20 Yrs Level % of Pay                        | \$ 1,781,594   | \$ 1,781,594        | \$ 1,879,927   | \$ 1,879,927           | \$ 1,879,927             | \$ -           |
| g. 15 Yrs Level Dollar                          | \$ 2,506,193   | \$ 2,506,193        | \$ 2,644,520   | \$ 2,644,520           | \$ 2,644,520             | \$ -           |
| h. 15 Yrs Level % of Pay                        | \$ 2,162,162   | \$ 2,162,162        | \$ 2,281,500   | \$ 2,281,500           | \$ 2,281,500             | \$ -           |
| 10. Alternate Annual Required Contribution      |                |                     |                |                        |                          |                |
| a. 30 Yrs Level Dollar                          | \$ 2,815,313   | \$ 2,769,984        | \$ 2,732,300   | \$ 2,732,300           | \$ 2,915,645             | \$ 3,439,441   |
| b. 30 Yrs Level % of Pay                        | \$ 2,364,197   | \$ 2,318,867        | \$ 2,256,285   | \$ 2,256,285           | \$ 2,439,630             | \$ 3,439,441   |
| c. 25 Yrs Level Dollar                          | \$ 2,942,907   | \$ 2,897,578        | \$ 2,866,936   | \$ 2,866,936           | \$ 3,050,281             | \$ 3,439,441   |
| d. 25 Yrs Level % of Pay                        | \$ 2,516,359   | \$ 2,471,030        | \$ 2,416,845   | \$ 2,416,845           | \$ 2,600,190             | \$ 3,439,441   |
| e. 20 Yrs Level Dollar                          | \$ 3,152,525   | \$ 3,107,195        | \$ 3,088,123   | \$ 3,088,123           | \$ 3,271,468             | \$ 3,439,441   |
| f. 20 Yrs Level % of Pay                        | \$ 2,753,375   | \$ 2,708,045        | \$ 2,666,943   | \$ 2,666,943           | \$ 2,850,287             | \$ 3,439,441   |
| g. 15 Yrs Level Dollar                          | \$ 3,528,696   | \$ 3,483,366        | \$ 3,485,057   | \$ 3,485,057           | \$ 3,668,402             | \$ 3,439,441   |
| h. 15 Yrs Level % of Pay                        | \$ 3,160,583   | \$ 3,115,253        | \$ 3,096,626   | \$ 3,096,626           | \$ 3,279,970             | \$ 3,439,441   |

APPENDIX - IV

PROJECTED BENEFIT PAYMENTS

| <u>Year</u> | <u>Amount</u> | <u>Accumulated</u> | <u>Year</u> | <u>Amount</u> | <u>Accumulated</u> | <u>Year</u> | <u>Amount</u> | <u>Accumulated</u> |
|-------------|---------------|--------------------|-------------|---------------|--------------------|-------------|---------------|--------------------|
| 2007        | \$ 1,159,555  | \$ 1,159,555       | 2040        | \$ 3,678,059  | \$ 91,115,778      | 2075        | \$ 445,068    | \$ 162,075,847     |
| 2008        | \$ 1,255,180  | \$ 2,414,735       | 2041        | \$ 3,672,719  | \$ 94,788,497      | 2076        | \$ 375,654    | \$ 162,451,501     |
| 2009        | \$ 1,338,448  | \$ 3,753,183       | 2042        | \$ 3,638,909  | \$ 98,427,406      | 2077        | \$ 313,657    | \$ 162,765,158     |
| 2010        | \$ 1,466,759  | \$ 5,219,942       | 2043        | \$ 3,570,137  | \$ 101,997,543     | 2078        | \$ 259,029    | \$ 163,024,187     |
| 2011        | \$ 1,553,514  | \$ 6,773,456       | 2044        | \$ 3,554,124  | \$ 105,551,667     | 2079        | \$ 211,690    | \$ 163,235,877     |
| 2012        | \$ 1,631,651  | \$ 8,405,107       | 2045        | \$ 3,452,542  | \$ 109,004,209     | 2080        | \$ 171,166    | \$ 163,407,043     |
| 2013        | \$ 1,701,704  | \$ 10,106,811      | 2046        | \$ 3,326,597  | \$ 112,330,806     | 2081        | \$ 136,907    | \$ 163,543,950     |
| 2014        | \$ 1,786,506  | \$ 11,893,317      | 2047        | \$ 3,228,655  | \$ 115,559,461     | 2082        | \$ 108,372    | \$ 163,652,322     |
| 2015        | \$ 1,887,442  | \$ 13,780,759      | 2048        | \$ 3,153,823  | \$ 118,713,284     | 2083        | \$ 84,993     | \$ 163,737,315     |
| 2016        | \$ 1,972,884  | \$ 15,753,643      | 2049        | \$ 3,063,536  | \$ 121,776,820     | 2084        | \$ 66,022     | \$ 163,803,337     |
| 2017        | \$ 2,075,217  | \$ 17,828,860      | 2050        | \$ 2,983,935  | \$ 124,760,755     | 2085        | \$ 50,754     | \$ 163,854,091     |
| 2018        | \$ 2,214,888  | \$ 20,043,748      | 2051        | \$ 2,896,541  | \$ 127,657,296     | 2086        | \$ 38,596     | \$ 163,892,687     |
| 2019        | \$ 2,349,259  | \$ 22,393,007      | 2052        | \$ 2,785,172  | \$ 130,442,468     | 2087        | \$ 29,011     | \$ 163,921,698     |
| 2020        | \$ 2,485,787  | \$ 24,878,794      | 2053        | \$ 2,678,167  | \$ 133,120,635     | 2088        | \$ 21,515     | \$ 163,943,213     |
| 2021        | \$ 2,566,324  | \$ 27,445,118      | 2054        | \$ 2,567,012  | \$ 135,687,647     | 2089        | \$ 15,743     | \$ 163,958,956     |
| 2022        | \$ 2,671,716  | \$ 30,116,834      | 2055        | \$ 2,452,279  | \$ 138,139,926     | 2090        | \$ 11,352     | \$ 163,970,308     |
| 2023        | \$ 2,742,265  | \$ 32,859,099      | 2056        | \$ 2,334,923  | \$ 140,474,849     | 2091        | \$ 8,056      | \$ 163,978,364     |
| 2024        | \$ 2,821,461  | \$ 35,680,560      | 2057        | \$ 2,216,692  | \$ 142,691,541     | 2092        | \$ 5,621      | \$ 163,983,985     |
| 2025        | \$ 2,955,241  | \$ 38,635,801      | 2058        | \$ 2,094,816  | \$ 144,786,357     | 2093        | \$ 3,860      | \$ 163,987,845     |
| 2026        | \$ 3,041,381  | \$ 41,677,182      | 2059        | \$ 1,971,649  | \$ 146,758,006     | 2094        | \$ 2,606      | \$ 163,990,451     |
| 2027        | \$ 3,142,940  | \$ 44,820,122      | 2060        | \$ 1,847,481  | \$ 148,605,487     | 2095        | \$ 1,728      | \$ 163,992,179     |
| 2028        | \$ 3,219,781  | \$ 48,039,903      | 2061        | \$ 1,723,037  | \$ 150,328,524     | 2096        | \$ 1,131      | \$ 163,993,310     |
| 2029        | \$ 3,309,122  | \$ 51,349,025      | 2062        | \$ 1,598,840  | \$ 151,927,364     | 2097        | \$ 729        | \$ 163,994,039     |
| 2030        | \$ 3,353,791  | \$ 54,702,816      | 2063        | \$ 1,475,324  | \$ 153,402,688     | 2098        | \$ 468        | \$ 163,994,507     |
| 2031        | \$ 3,440,835  | \$ 58,143,651      | 2064        | \$ 1,353,559  | \$ 154,756,247     | 2099        | \$ 296        | \$ 163,994,803     |
| 2032        | \$ 3,527,646  | \$ 61,671,297      | 2065        | \$ 1,234,172  | \$ 155,990,419     | 2100        | \$ 184        | \$ 163,994,987     |
| 2033        | \$ 3,626,423  | \$ 65,297,720      | 2066        | \$ 1,117,976  | \$ 157,108,395     | 2101        | \$ 111        | \$ 163,995,098     |
| 2034        | \$ 3,668,515  | \$ 68,966,235      | 2067        | \$ 1,005,514  | \$ 158,113,909     | 2102        | \$ 70         | \$ 163,995,168     |
| 2035        | \$ 3,718,365  | \$ 72,684,600      | 2068        | \$ 897,381    | \$ 159,011,290     | 2103        | \$ 40         | \$ 163,995,208     |
| 2036        | \$ 3,720,093  | \$ 76,404,693      | 2069        | \$ 794,337    | \$ 159,805,627     | 2104        | \$ 16         | \$ 163,995,224     |
| 2037        | \$ 3,684,212  | \$ 80,088,905      | 2070        | \$ 697,130    | \$ 160,502,757     | 2105        | \$ 7          | \$ 163,995,231     |
| 2038        | \$ 3,683,633  | \$ 83,772,538      | 2071        | \$ 606,099    | \$ 161,108,856     | 2106        | \$ 4          | \$ 163,995,235     |
| 2039        | \$ 3,665,181  | \$ 87,437,719      | 2072        | \$ 521,923    | \$ 161,630,779     | 2107        | \$ 1          | \$ 163,995,236     |
|             |               |                    |             |               |                    | 2108        | \$ 1          | \$ 163,995,237     |

**APPENDIX – V**  
**GLOSSARY**

**Actuarial Accrued Liability.** The portion of the present value of benefits which is not provided for by future Normal Costs.

**Actuarial Present Value of Total Projected Benefits.** The present value, as of the valuation date, of future benefit payments expected to be paid to employees, retirees, and covered dependents.

**Annual OPEB Cost.** The accrual basis measure of the periodic cost of an employer's participation in a defined benefit OPEB Plan.

**Annual Required Contributions of the Employer (ARC).** The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters defined in GAS 45.

**Investment Return Assumption (Discount Rate).** The rate used to adjust a series of future benefit payments to reflect the time value of money.

**Healthcare Cost Trend Rate.** The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services and technological developments.

**Net OPEB Obligation.** The cumulative difference since the effective date of GAS 45 between the annual OPEB cost and the employer's contributions to the plan.

**Normal Cost.** The portion of the Actuarial Present Value of plan benefits which is allocated to a valuation year by the Actuarial Cost Method.

**OPEB.** Postemployment benefits other than pension benefits.

**Pay-As-You-Go.** The amount of the benefits paid out to plan participants during the year.

**Per Capita Claims Cost.** The current average annual cost of providing postretirement health care benefits to one person.